arrows more clearly illustrate the direction of reformed gas flow through the hydrogen purifying apparatus as disclosed in the specification of the invention.

In the Claims:

Please amend claims 1, 8 and 10-11 as shown in the attached marked-up version of the claims in which additions are shown by underlining and deletions shown by bracketing to read as follows:

--1. (Three Times Amended) A hydrogen purifying apparatus for oxidizing and removing carbon monoxide in a reformed gas containing carbon monoxide in addition to a main component of hydrogen gas, comprising a reaction segment having a catalyst bed for oxidizing carbon monoxide, a reformed gas inlet for supplying said reformed gas to said reaction segment via a reformed gas pathway, an oxidant gas supplying segment for supplying an oxidant gas to said reformed gas pathway, a cooler for cooling an upstream side of said catalyst bed, and means for heating a downstream side of said catalyst bed,

wherein said means for heating the downstream side of said catalyst bed is a portion of the reformed gas pathway formed in proximity with said catalyst bed via a partition so as to heat said downstream side of said catalyst bed by said reformed gas before passing through said cooler.

8. (Three Times Amended) The hydrogen purifying apparatus in accordance with claim 1, wherein said reformed gas flows in a first direction prior to passing through said cooler, and passes through said catalyst layer in a second direction, wherein the first direction and second direction are opposing.

10. (Amended) The hydrogen purifying apparatus in accordance with claim 1, wherein said reaction segment is tube-shaped and said flow pathway of said reformed gas before the passage through said cooler is formed around said reaction segment.

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11. (Amended) The hydrogen purifying apparatus in accordance with claim 1, wherein two or more reaction segments are connected in parallel.--

Please add new claims 20-26 as follows:

--20. (New Claim) The hydrogen purifying apparatus in accordance with claim 1, wherein said means for heating said downstream side of said catalyst bed further comprises an electric heater.

21. (New Claim) A hydrogen purifying apparatus for oxidizing and removing carbon monoxide in a reformed gas containing carbon monoxide in addition to a main component of hydrogen gas, comprising a reaction segment having a catalyst bed for oxidizing carbon monoxide, a reformed gas inlet for supplying said reformed gas to said reaction segment via a reformed gas pathway, an oxidant gas supplying segment for supplying an oxidant gas to said reformed gas pathway, a cooler for cooling said reformed gas in said reformed gas pathway in a vicinity of an upstream side of said catalyst bed, and means for heating a downstream side of said catalyst bed,

C4

wherein said reformed gas pathway at least partially surrounds said catalyst bed, such that said means for heating said downstream side of said catalyst bed comprises at least a portion of said reformed gas in said reformed gas pathway and such that said reformed gas is cooled in said reformed gas pathway by said catalyst bed before passing through said cooler.

22. (New Claim) The hydrogen purifying apparatus in accordance with claim 21, wherein said means for heating said downstream side of said catalyst bed further comprises an electric heater.

23. (New Claim) The hydrogen purifying apparatus in accordance with claim 21, wherein an upstream side portion of the catalyst bed is formed of different catalyst materials than that of a downstream side portion, and the catalyst constituting said downstream side portion exerts an activity at lower temperature than the catalyst constituting said upstream side portion.

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24. (New Claim) The hydrogen purifying apparatus in accordance with claim 23, wherein said catalyst is supported by a metallic material.

25. (New Claim) The hydrogen purifying apparatus in accordance with claim 21, further comprising a gas flow rate control valve capable of changing an amount of oxidant gas to be supplied in correspondence with a temperature of said catalyst bed.

26. (New Claim) The hydrogen purifying apparatus in accordance with claim 21, wherein said reformed gas flows in a first direction prior to passing through said cooler, and passes through said catalyst layer in a second direction, wherein the first direction and second direction are opposing.- -

REMARKS

Claims 1, 3-4, 6, 8-17 and 19-26 are currently pending in the application.

Claims 1, 8 and 10-11 have been amended as part of this amendment. Support for amending the present claims is found throughout the text of the specification. Specifically, support for amending claims 1 and 8 by replacing "water-cooled apparatus" with "cooler" can be